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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,546

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James D. Mercer

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EXAMINER

MUI, CHRISTINE T

ART UNIT

PAPER NUMBER

1709

MAIL DATE

DELIVERY MODE

05/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,546

Applicant(s)

MERCER ET AL.

Examiner

Christine T. Mui

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1709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

a. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 2, 4 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,971,156 to Slocum et al.

Slocum et al. disclose a plastic molded insert 1 (molded unitary base) comprising: numerous component lead nesting features 6 (supports); and flexible retention devices 20a, 20b (cantilevered retainers) having head 32 (protrusion). A semiconductor component is held by a pick and place mechanism, its leads aligned with

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the nesting features, the component forced past the retention devices, and the head of the retention devices contact the top edge of the component to hold and restrain motion of the component (col. 3, line 48 – col. 6, line 21).

3. Claims 1, 2, 4, 7-13, 15, 17 and 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,775,500 to Williams.

Williams discloses a multiple audio cassette container comprising: one piece molded plastic base 3 (molded unitary base) comprising: lips 63 (supports) to support each cassette; flexible stems 70, 71 with locking tabs 76 (cantilevered retainers with protrusions); and lid 2 having nub 35 (fastener) to snap into slot 36 of the base, ribs 26 (protrusions) for assisting in positioning of the cassette and inner stepped shoulder 20a (alignment guide) to mate with outer stepped shoulder 21a (alignment guide) of the base. Cassettes are pushed over stems to be held in position by the locking tabs (col. 4-10).

4. Claims 1, 3, 4 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 4,681,221 to Chickanosky et al.

Chickanosky et al. disclose an injection molded single piece holder 20 comprising: lips 40 (supports) to hold a chip; and snap-acting retaining arms 44, 46 (cantilevered retainers) to engage and retain the chip. The retaining arms have bumps (texture) on their surface (see Figure 1, col. 3-5).

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5. Claims 1, 3-6, 12-14, 16-19 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 6,082,547 to Nentl et al.

Nentl et.al. disclose an injection molded plastic jig comprising: pocket perimeter portions 38 (supports) for holding components; and resiliently flexible positioning members 50 (cantilevered retainers). The plastic may also have carbon powder for providing static dissipative characteristics (electrically conductive polymer and ground connector). The pockets can be of the same size or vary in size and shape according to component size (col. 1-4).

6. Claims 1, 2, 4, 7-11 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by USP 7,172,069 to Coffin et al.

Coffin et al. disclose a container for a cartridge comprising: thermoplastic tub 12 (molded unitary base) comprising: riser 56 having supports (see areas between clips 62 in Figure 3); clips 62 (cantilevered retainers) to secure the cartridge; and lid 14 for coupling with the tub and having flange 84 (alignment guide) to mate with a channel 98 (alignment guide) of the tub (configure to couple), raised bead 94 (fastener) to secure the lid to the tub and locating features 88 (protrusions) to maintain the cartridge in position (col. 2-4).

7. Claims 1-3, 12 and 15-16 are rejected under 35 U.S.C. 102(e) as being anticipated by US Application No. 20040074211 to Shibata (herein referred "Shibata").

Regarding claims 1, 2, 12 and 15, the reference Shibata discloses a tray that can be formed by injection molding of a heat resistant resin such as PPE (poly-phenylene-ether) with carbon fibers or carbon black (see [0023], lines 5-6) with a plurality of pockets used for holding semiconductor devices and a retainer (see [0013], lines 2-5). The tray has retainers in each pocket with a groove with protrusions projecting from the two sidewalls (see [0025], lines 2-4). The cover of the grooves is brought into engagement, forming an interference, with the protrusions (see [0025], lines 4-5) and made to fit snugly on the opening of the groove to securely retain the object in the grooves, inhibiting unintentional removal of the object from the support protrusions (see [0026], lines 3-4).

As for claim 3 and 16, the reference Shibata discloses the protrusions protruding from the sidewalls of the grooves made of poly-phenylene-ether with carbon fibers or carbon black, which gives the protrusions the characteristic of a having a textured surface, where friction is formed between the two surfaces, used to inhibit removal of the cover between the protrusions (see [0023], lines 5-8).

8. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,533,614 to Walker (herein referred "Walker").

Walker discloses an embodiment used to display discs having four cylindrical recesses in a single molded piece base, spacing projections and clasp means. The

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container for holding the discs is able to grasp the objects using a clasping means, place the object above a support in the form of a projection space allowing a distance between the object and base, forcing the object past a flap that is cantilevered at the outer ends, and restricting movement of the object using the flaps where the disc is engaged in the protrusion of the clasping means while being hung on a wall inhibiting movement of the object (see column 3, lines 8-33).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.
Ascertaining the differences between the prior art and the claims at issue.
Resolving the level of ordinary skill in the pertinent art.
Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata as applied to claims 1 and 12 above, and further view of USP 5,294,655 to Lee (herein to "Lee").

Shibata discloses the claimed invention except for the unitary base being constructed of electrically insulative polymer. Shibata teaches that the base is constructed of poly-phenylene-ether with a conductive filler of carbon fiber or carbon black (see [0023], lines 5-8). Lee teaches that is known to use polymers, which are poly-phenylene-ether based compositions to be used as dielectric insulators (see column 1, lines 7-9 and lines 23-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the base of PPE to improve the properties of the base.

12. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata as applied to claims 1 and 12 above, and further view of USP 5,103,976 to Murphy (herein referred "Murphy").

Shibata discloses the claimed invention except for the electrically insulative polymer, configured to dissipate an electrical charge. Murphy teaches that it is known to construct a molded tray with a plurality of storage pocket areas made of polypropylene or a similar thermoplastic with an antistatic coat to dissipate electrostatic charges (see column 5, lines 42-47 and lines 58-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the base of PPE that is able to dissipate any electrostatic charge that might accumulate when the tray is being handled or transported, minimizing the overall potential for accumulating electrostatic charge.

13. Claims 7-9 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata as applied to claims 1 and 12 above, and further in view of US Application No. 20050133404 to White (herein referred "White").

Regarding claims 7 and 20, the reference Shibata discloses the claimed invention except for a lid coupled to the base. White teaches a tray frame made of a plastic with a plurality of pockets where there is a cover that can be coupled in a fastening or adhesive method. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a unitary base container with a cover or lid that are joined as a pair to protect the objects in the plurality of pockets and prevent further vertical or lateral unintentional movement, securing the objects in place.

As for claims 8 and 21, the reference Shibata discloses the claimed invention except for a lid coupled to the base wherein a part of the bottom surface of the unitary

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base is configured to couple to a part of an upper surface of the lid. White teaches a tray frame made of a plastic with a plurality of pockets where there is a cover that can be coupled in a fastening or adhesive method wherein the bottom side of the tray cover or bottom side of an upper tray can be stacked on a lower tray of same design (see [0035], lines 37-42). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a container with a coupled lid where the bottom surface of a unitary base is configured to couple to portion of the upper lid to restrict movement of the trays and to enable easy stacking a fastening between the plates.

As for claims 9 and 22, the reference Shibata discloses the claimed invention except for a lid coupled to the base by a fastener to secure the lid and base together. White teaches a tray frame made of a plastic with a plurality of pockets where there is a cover that can be coupled in a fastening or adhesive method wherein the fastening or adhesive method can be glue, adhesive tap, ultrasonic welding, plastic welding or snaps (see [0026], lines 5-8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a container with a lid coupled to the base by fastening means of glue, adhesive tap, ultrasonic welding, plastic welding, snaps or similar coupling means in order to secure or protect objects in the pockets of the tray and inhibit movement of the object in the pockets of the tray or movement between bases of the trays.

14. Claims 10-11 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata as applied to claims 1 and 12 above, and further in view of White and USP 5,418,692 to Nemoto (herein referred "Nemoto").

Regarding claims 10 and 23, the reference Shibata discloses the claimed invention except for a lid coupled to the base wherein the lid has at least one protrusion. White teaches a tray frame with a cover that can be coupled in a fastening or adhesive method. Nemoto teaches that it is known to construct a tray to hold semiconductor devices where the tray can also be used as a cover when stacked upon each other where the upper and lower trays are fitted along the frame and where the tapered faces at the bottom of the tray fit into outer edges of the top tray (see column 4, lines 31-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a container with a coupled lid where the bottom surface of a unitary base is configured to couple to a portion of the upper lid to provide secure means to restrict movement of objects.

As for claims 11 and 24, the reference Shibata discloses the claimed invention except for a lid coupled to the base wherein the lid and base have alignment guides. White teaches a tray frame with a cover that can be coupled in a fastening or adhesive method. Nemoto teaches that it is known to construct a tray to hold semiconductor devices where the tray can also be used as a cover when stacked upon each other where there is an edge frame on the entire outer peripheral portion of the tray and guide ribs disposed corresponding to respective pockets (see column 3, lines 49-52). The trays are constructed so that at least one tray constituting an upper tray and having the

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same structure as the tray constituting a lower tray and having an upper surface piled up on the first tray (see column 2, lines 6-10), where the guide ribs are on the undersurface of each of the upper and lower trays (see column 2, lines 25-26). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a container with a coupled lid with guide ribs on the lid and base to an interface between the base, lid and object to inhibit movement.

15. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata as applied to claim 12 above, and further in view of White.

Regarding claims 13 and 14, the reference Shibata discloses the claimed invention except for where the pluralities of supports comprise of two sets of supports where the objects have substantially the same shape. White discloses a tray frame where the pluralities of pockets are determined by the particular selection of notches for intersection between the dividers. The dividers can be moved to any notch to enlarge or reduce the size of the pockets (see [0022], lines 10-19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the base where the sets of supports can be made removable and be able to be positioned to modify the sizes or shapes of the pocket or units in the base of similar shape or different shape to accommodate different object of similar or dissimilar shapes when storing or transport the container.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references disclose containers having cantilevered retainers:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Mui whose telephone number is (571) 270-3243. The examiner can normally be reached on Monday-Friday 8-5; Alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CTM

Melvin Hayes
Primary Examiner
AU1734